Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A vocoder system comprising:

formant detection means for analyzing a first musical tone signal to detect formant characteristics of the first musical tone signal;

musical tone signal input means for inputting a second musical tone signal that corresponds to specified pitch information;

formant generation means for generating new formant characteristics of the first musical tone signal based on the formant characteristics of the first musical tone signal, formant control information for generating the new formant characteristics from the formant characteristics, and the specified pitch information corresponding to the second musical tone signal;

division means for dividing the second musical tone signal into a plurality of frequency bands, the respective center frequencies of which have been fixed;

setting means for setting modulation levels, based on the new formant characteristics of the first musical tone signal, only at the fixed center frequency of each of the frequency bands of the second musical tone signal; and

modulation means for modulating a level of a signal of each of the frequency bands of the second musical tone signal based on the respective modulation level set in the setting means.

2. (Original) The vocoder system cited in Claim 1, wherein the formant detection means comprises a filter.

3. (Original) The vocoder system cited in Claim 1, wherein the formant detection means comprises a Fourier transform.

4. (Original) The vocoder system cited in Claim 1, wherein the division means comprises a filter.

5. (Original) The vocoder system cited in Claim 2, wherein the division means comprises a filter.

6. (Original) The vocoder system cited in Claim 3, wherein the division means comprises a filter.

7. (Original) The vocoder system cited in Claim 1, wherein the division means comprises a Fourier transform.

8. (Original) The vocoder system cited in Claim 2, wherein the division means comprises a Fourier transform.

9. (Original) The vocoder system cited in Claim 3, wherein the division means comprises a Fourier transform.

10. (Previously Presented) The vocoder system cited in Claim 1, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

11. (Previously Presented) The vocoder system cited in Claim 2, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

12. (Previously Presented) The vocoder system cited in Claim 3, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

13. (Previously Presented) The vocoder system cited in Claim 4, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

14. (Previously Presented) The vocoder system cited in Claim 5, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

15. (Previously Presented) The vocoder system cited in Claim 6, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

16. (Previously Presented) The vocoder system cited in Claim 7, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

17. (Previously Presented) The vocoder system cited in Claim 8, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

18. (Previously Presented) The vocoder system cited in Claim 9, wherein the setting means sets the modulation levels of the second musical tone signal by interpolation processing based on the new formant characteristics of the first musical tone signal.

19. (Previously Presented) The vocoder system cited in Claim 1, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

20. (Previously Presented) The vocoder system cited in Claim 2, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

21. (Previously Presented) The vocoder system cited in Claim 3, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

22. (Previously Presented) The vocoder system cited in Claim 4, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

23. (Previously Presented) The vocoder system cited in Claim 5, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

24. (Previously Presented) The vocoder system cited in Claim 6, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

25. (Previously Presented) The vocoder system cited in Claim 7, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

26. (Previously Presented) The vocoder system cited in Claim 8, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

27. (Previously Presented) The vocoder system cited in Claim 9, wherein the setting means sets the modulation levels of the second musical tone signal based on the specified pitch information and the new formant characteristics of the first musical tone signal.

28. (Original) The vocoder system cited in Claim 1, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

29. (Original) The vocoder system cited in Claim 2, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

30. (Original) The vocoder system cited in Claim 3, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

31. (Original) The vocoder system cited in Claim 4, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

32. (Original) The vocoder system cited in Claim 5, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

33. (Original) The vocoder system cited in Claim 6, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

34. (Original) The vocoder system cited in Claim 7, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

35. (Original) The vocoder system cited in Claim 8, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

36. (Original) The vocoder system cited in Claim 9, wherein the setting means stores a formant change table that changes the formant non-uniformly and sets the modulation levels that correspond to each of the frequency bands based on the change table.

37. (Previously Presented) A method for generating a musical signal with a computer system comprising a detector, an input device, a frequency divider, and a processor, the method comprising:

analyzing a first musical tone signal with the detector to detect formant characteristics of the first musical tone signal;

inputting a second musical tone signal into the input device that corresponds to specified pitch information;

generating new formant characteristics of the first musical tone signal based on the formant characteristics of the first musical tone signal, formant control information for generating the new formant characteristics from the formant characteristics, and the specified pitch information corresponding to the second musical tone signal;

dividing the second musical tone signal with the frequency divider into a plurality of frequency bands, the respective center frequencies of which have been fixed;

setting modulation levels with the processor, based on the new formant characteristics of the first musical tone signal, only at the fixed center frequency of each of the frequency bands of the second musical tone signal; and

modulating with the processor a level of a signal of each of the frequency bands of the second musical tone signal based on the respective modulation level..

38. (Previously Presented) A vocoder system comprising:

a formant detector for analyzing a first musical tone signal to detect formant characteristics of the first musical tone signal;

an input device for inputting a second musical tone signal that corresponds to specified pitch information;

a formant generator for generating new formant characteristics of the first musical tone signal based on the formant characteristics of the first musical tone signal, formant control information for generating the new formant characteristics from the formant characteristics, and the specified pitch information corresponding to the second musical tone signal;

a divider connected to the input device for dividing the second musical tone signal into a plurality of frequency bands, the respective center frequencies of which have been fixed;

a level setter for setting modulation levels, based on the new formant characteristics of the first musical tone signal, only at the fixed center frequency of each of the frequency bands of the second musical tone signal; and

a modulator for modulating a level of a signal of each of the frequency bands of the second musical tone signal based on the respective modulation level set in the level setter.

39. (Previously Presented) The vocoder system cited in Claim 38, wherein the formant detector comprises a filter.

40. (Previously Presented) The vocoder system cited in Claim 38, wherein the formant detector comprises a Fourier transform.

41. (Previously Presented) The vocoder system cited in Claim 1, wherein the first musical tone signal is produced by a male voice or a female voice.

42. (Previously Presented) The vocoder system cited in Claim 1, wherein the level of the signal of each of the frequency bands modulated by the modulation means is an amplitude of the signal.

43. (Previously Presented) The vocoder system cited in Claim 1, wherein, in the modulation means, the center frequencies of the frequency bands are maintained as fixed in the division means.

44. (Previously Presented) The vocoder system cited in Claim 10, wherein the setting means sets the modulation levels by using a polynomial interpolation.

45. (Previously Presented) The vocoder system cited in Claim 1, wherein the center frequencies of the modulated signals of the frequency bands are equal to the respective center frequencies of the frequency bands, as fixed by the division means.

46. (Previously Presented) The vocoder system cited in Claim 1, wherein the first musical tone signal is a speech signal.

47. (Previously Presented) The vocoder system cited in Claim 10, wherein the setting means sets the modulation level at the fixed center frequency of at least one of the frequency bands by interpolation processing based on the formant characteristics at a plurality of frequencies.

48. (Previously Presented) The vocoder system cited in Claim 44, wherein the setting means sets the modulation level at the fixed center frequency of at least one of the frequency bands by using a polynomial interpolation of the formant characteristics at a plurality of frequencies.

49. (Previously Presented) The vocoder system cited in Claim 4,

wherein the filter comprises a digital filter having frequency characteristics defined by a plurality of filter coefficients, and

wherein the setting means sets the modulation levels, free of changing the filter coefficients.

50. (Previously Presented) The vocoder system cited in Claim 4,

wherein the filter comprises a digital filter having frequency characteristics defined by a plurality of filter coefficients, and

wherein the setting means sets the modulation levels while the filter coefficients remain constant.

51. (Cancelled).

52. (Previously Presented) A vocoder system comprising:

formant detection means for analyzing a first musical tone signal to detect formant characteristics of the first musical tone signal;

musical tone signal input means for inputting a second musical tone signal that corresponds to specified pitch information;

formant generation means for generating new formant characteristics of the first musical tone signal based on the formant characteristics of the first musical tone signal, formant control information for generating the new formant characteristics from the formant characteristics, and the specified pitch information corresponding to the second musical tone signal;

filtering means for dividing the second musical tone signal into a plurality of frequency bands based on respective fixed center frequencies;

setting means for setting modulation levels, based on the new formant characteristics of the first musical tone signal, only at the fixed center frequency of each of the frequency bands of the second musical tone signal; and

modulation means for modulating a level of a signal of each of the frequency bands of the second musical tone signal based on the respective modulation level set in the setting means.

53. (Cancelled).

54. (Previously Presented) The vocoder system cited in claim 1, further comprising:

first signal division means for dividing the first musical tone signal into a plurality of frequency bands, the respective center frequencies of which have been fixed;

a level detection means for detecting a level of each of the frequency bands of the first musical tone signal;

the formant detection means for detecting the formant characteristics of the first musical tone signal based on the detected levels of each of the frequency bands of the first musical tone signal.

55. (Cancelled)